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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,170	05/04/2001	Lyndsay Williams	2730	9681

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EXAMINER	
NGUYEN, JENNIFER T	

ART UNIT	PAPER NUMBER
2674	

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/849,170	WILLIAMS ET AL.	
	Examiner	Art Unit	
	Jennifer T. Nguyen	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is responsive to RCE filed on 12/12/05.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5, 9-14, and 19-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Willan (Patent No.: US 5,239,292).

Regarding claim 1, referring to Figs. 2-4, Willan teaches a computer system (i.e., graphic system), comprising:

a writing instrument (i.e., pen) that generates, using a ballistic information generator (i.e., accelerator to generate the acceleration information, not shown) that generates ballistic information about self-movement (i.e., the movement of input device relates to the surface) (col. 1, lines 54-67), movement information including acceleration information (acceleration/velocity) from a user's handwriting (col. 3, lines 59-67, col. 4, lines 56-66, col. 5, line 37 to col. 6, line 55);

a conversion component (i.e., calculation routine 54, fig. 2) that utilizes the acceleration information to generate line thickness information (i.e., width of the pattern) (col. 4, lines 28-33).

Regarding claim 2, Willan further teaches the writing instrument is a pen (col. 3, lines 13-16).

Regarding claim 3, Willan further teaches an accelerometer (not shown, to generate acceleration information 56) configured to generate the acceleration information (col. 3, lines 35-47).

Regarding claims 5 and 14, Willan teaches the conversion component is located remote from the writing instrument (i.e., computer calculates the acceleration information to convert to the thickness) and transmitting the digital data to the conversion component (see abstract).

Regarding claim 9, referring to Figs. 2-4, Willan teaches a computer system (i.e., graphic system), comprising:

a writing instrument (i.e., pen) that generates movement information including acceleration information (acceleration/velocity) from a user's handwriting (col. 3, lines 59-67, col. 4, lines 56-66, col. 5, line 37 to col. 6, line 55);

a conversion component (i.e., calculation routine 54, fig. 2) that utilizes the acceleration information to generate line thickness information (i.e., width of the pattern) (col. 4, lines 28-33) based upon spacing of plots in a map of a plot (Fig. 4) of the movement information .

Regarding claims 10-11 and 19-20, Willan further teaches the thickness information is based upon the samples/unit distance of the plots (Fig. 4, col. 4, line 45 to col. 5, line 36).

Regarding claims 12, 13, 21, and 22, Willan further teaches the thickness information increases a thickness component as the wavelengths increase (col. 1, lines 60-64, col. 4, line 45 to col. 5, line 36).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 4, 6, 7, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willan (Patent No.: US 5,239,292) in view of O'Connor et al. (Patent No.: US 6,188,392).

Regarding claim 4, Willan differs from claim 4 in that he does not specifically teach the accelerometer generates analog movement information, and an analog-to-digital converter for converting the analog movement information to digital data.

However, referring to Fig. 1, O'Connor teaches accelerometer generates analog movement information, and an analog-to-digital converter (116) for converting the analog movement information to digital data (col. 5, lines 29-45). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the analog-to-digital converter as taught by O'Connor in the system of Willan in order to provide a digital output for the device.

Regarding claims 6 and 15, the combination of Willan and O'Connor teaches the digital data is transmitted via a wireless connection (col. 6, lines 3-22 of O'Connor).

Regarding claims 7 and 16, the combination of Willan and O'Connor further teaches the digital data is transmitted via a hardwired connection (col. 6, lines 23-39 of O'Connor).

6. Claims 8, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willan (Patent No.: US 5,239,292) in view of Yamashita (JP 06-019614).

Regarding claims 8, 17, and 18, Willan differs from claims 8, 17, and 18 in that he does not specifically teach the movement comprises a tilt information.

Yamashita teaches the movement of a input device accordance with the tilting degree to the surface of a tablet can control the line width (see abstract and constitution, fig. 3). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the tilt information as taught by Yamashita in the system of Willan in order to provide a handwriting form is displayed on a screen by natural touch.

Response to Arguments

7. Applicants' arguments filed 12/12/05, have been fully considered but they are not persuasive because as follows:

In response to Applicants' argument filed "the system of Willan does not teach or even suggest generating movement information including acceleration information to determine line thickness." However, Willan teaches a means for displaying patterns which follow the movement of the pen, wherein means are provided for determining at least one differential derivation (the first determined derivative X may be velocity, the second determined derivative Y acceleration, or the third determined derivative Z) is used to control the shape and width of the displayed pattern (col. 1, lines 51-66, col. 7, lines 29-35, fig. 3). An example of converting the X velocity and Y velocity to determine the drip size (col. 5, line 37 to col. 6, line 41, figs. 8 and 9). Another example of example of converting the X acceleration and Y acceleration to determine the drip size (col. 6, lines 42-55). Therefore, the system of Willan not necessarily requires a pressure sensor in order to measure pressure (determined derivative Z) at the point of an input device.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer T. Nguyen whose telephone number is 571-272-7696. The examiner can normally be reached on Mon-Fri: 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick N. Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JNguyen
02/14/06

PATRICK N. EDOUARD
SUPERVISORY PATENT EXAMINER